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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,428	09/26/2003	Teow Beng Hur	82533	8193

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EXAMINER	
PLUMMER, ELIZABETH A	
ART UNIT	PAPER NUMBER
3635	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/671,428	HUR, TEOW BENG	
	Examiner	Art Unit	
	ELIZABETH A. PLUMMER	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendments and arguments received 11/23/2007 have been entered and considered. Claims 20 and 21 have been added. An examination of pending claims 1-21 is herein presented.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 12, 15, 17, and 19-21 rejected under 35 U.S.C. 102(b) as being anticipated by Vaughan et al. (US Patent 3,687,412).

a. Regarding claim 1, Vaughan et al. discloses a formwork system for use in casting prefabricated wall or floor panels (abstract) including a support structure (13,14) including a platform (14) and a sub-structure (13) supporting the platform (Fig. 1, 2), the platform having a platform surface defining a first panel surface of a panel to be cast, a plurality of side forms (15,16) being positionable on the platform surface (Fig. 2), each side form having a side form surface defining an additional panel surface of the panel to be cast (column 2, lines 44-46), each side form being braced by at least one brace structure (Fig. 1,2) connected to the support structure (13) (Fig. 1) for bracing the plurality of side forms in position, and each brace structure having adjustments means (19,25,26) for permitting

adjustment of the position of each side form on the platform to adjust the length and width dimensions of the panel to be cast (column 3, lines 43-47).

b. Regarding claim 2, each brace structure also includes an abutment connected to the substructure (28,38), a structure (17) extending from the side form, the adjustment means (25,26) providing a connection between the structure and the abutment that permits adjustment of the position of each side form of the platform.

c. Regarding claim 3, the adjustment means includes a threaded bore associated with the abutment (Fig. 2) and a threaded shaft forming at least in part the strut which is received by the threaded bore so that rotation of the shaft relative to the bore causes adjustment of the strut and the side form relative to the abutment (Fig. 2; column 3, lines 60-68).

d. Regarding claim 4, the adjustment means includes an edge (distal edge from side form) about which the strut can pivot, a height adjuster (35) is located at a distal end of the strut for adjusting the position of the distal end of the strut relative to the sub-structure, a proximal end of the strut engages the side form (via 20) so that elevating the position of the distal end of the strut creates a clamping force at the proximal end of the strut clamping the side form in position on the platform (column 3, lines 31-35).

e. Regarding claim 12, the substructure includes beams which provide support to the platform (Fig. 2).

f. Regarding claim 15, the formwork system is extended using a modular extension mould to prefabricate higher heights of wall panel (column 4, lines 61-68).

g. Regarding claim 17, the substructure includes channels which provide support to the platform (Fig. 2).

h. Regarding claim 19, Vaughan et al. discloses a formwork system for use in casting prefabricated panels (abstract) including a support structure (13,14) including a platform (14) and a sub-structure (13) supporting the platform (Fig. 1, 2), a plurality of side forms (15,16) being positionable on the platform surface to define sides of the panel to be cast (Fig. 2; column 2, lines 44-46), each side form being braced by at least one brace structure (Fig. 1,2) connected to the support structure (13) (Fig. 1) for bracing the plurality of side forms in position, and each brace structure having adjustments means (19,25,26) for permitting adjustment of the position of each side form on the platform to adjust the length and width dimensions of the panel to be cast (column 3, lines 43-47), wherein each brace structure also includes an abutment connected to the substructure (28,38), a strut (17) extending from the side form, the adjustment means (25,26) providing a connection between the structure and the abutment that permits adjustment of the position of each side form of the platform, wherein the adjustment means includes an edge (distal edge from side form) about which the strut can pivot, a height adjuster (35) is located at a distal end of the strut for adjusting the position of the distal end of the strut relative to the sub-structure, a

proximal end of the strut engages the side form (via 20) so that elevating the position of the distal end of the strut creates a clamping force at the proximal end of the strut clamping the side form in position on the platform (column 3, lines 31-35).

i. Regarding claim 20, Vaughan et al. discloses a formwork system for use in casting prefabricated wall or floor panels (abstract) including a support structure (13,14) including a platform (14) and a sub-structure (13) supporting the platform (Fig. 1, 2), the platform having a platform surface defining a first panel surface of a panel to be cast, four side forms (upper left and right 15, top and bottom16) being positionable on the platform surface (Fig. 2), each side form having a side form surface defining one of four additional panel surfaces of the panel to be cast (column 2, lines 44-46) such that a first two of the side forms together set the length of the panel (15) and a second two of the side forms together set the width of the panel (16), each side form being braced by at least one brace structure (Fig. 1,2) connected to the support structure (13) (Fig. 1) for bracing the plurality of side forms in position, and each brace structure having adjustments means (19,25,26) for permitting adjustment of the position of each side form on the platform to adjust the length and width dimensions of the panel to be cast (column 3, lines 43-47).

j. Regarding claim 21, the adjustment means can permit continuous adjustment in a single dimension of the position of each side form on the platform

to adjust the length or width dimensions of the panel to be cast (column 1, lines 45-47).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5-7, 11, 16 and 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. (US Patent 3,687,412) in view of Stehm (US Patent 1,100,452).

a. Regarding claim 5, Vaughan et al. discloses the invention as claimed except for the height adjuster including a threaded bore associated with the distal end of the strut, and a threaded shaft received by the threaded bore, a distal end of the threaded shaft engages the substructure so that rotation of the threaded shaft relative to the threaded bore causes the elevation of the distal end o the strut to alter, to thereby alter the clamping force. However, Vaughan et al. discloses a method of using a threaded bore and associated shaft to move the side forms. While Vaughan does not disclose that the same method of using a threaded bore and associated shaft can be used to move the height adjuster rather than manually moving the height adjuster, it is also well known in the art that threaded bores and associated shafts can be used to move objects in the z-direction. For example, Stehm teaches moving a height adjuster with a threaded

bore and associated shaft (page 3, lines 1-15; Fig. 5,6) in order to be able to adjust the height and then keep it locked in one place. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vaughan et al. to use the method of a threaded bore at the distal end of the strut with a corresponding thread shaft to move the distal end up or down, such as taught by Stehm, in order to more easily raise or lower the height adjuster.

b. Regarding claims 6 and 11, Stehm further teaches that all of the side forms and bottom platform can come in various sizes (page 2, lines 122-128) in order to produce panels of different shapes and sizes. While Stehm does not explicitly state that the height of the side forms can vary, it would have been obvious to vary any of the dimensions, including the height, width and length, in order to create the panels in a multitude of different shapes. Therefore while Vaughan et al. in view of Stehm does not explicitly disclose a plurality of sets of side forms each varying in height to permit casting of panels of varying thickness, it would have been a mater of obvious design choice to supply side forms which vary in any dimension, such as taught by Stehm, in order to be able to create a greater variety of panels.

c. Regarding claim 7, Vaughan et al. further discloses the substructure includes beams which provide support to the platform (Fig. 2).

d. Regarding claim 16, the substructure includes channels which provide support to the platform (Fig. 2).

e. Regarding claim 18, Stehm further teaches that all of the side forms and bottom platform can come in various sizes (page 2, lines 122-128) in order to produce panels of different shapes and sizes. While Stehm does not explicitly state that the lengths of the side forms can vary, it would have been obvious to vary any of the dimensions, including the height, width and length, in order to create the panels in a multitude of different shapes. Therefore while Vaughan et al. in view of Stehm does not explicitly disclose a plurality of sets of side forms each varying in height to permit casting of panels of varying thickness, it would have been a mater of obvious design choice to supply side forms which vary in any dimension, such as taught by Stehm, in order to be able to create a greater variety of panels.

5. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. (US Patent 3,687,412) in view of Stehm (US Patent 1,100,452) as applied to claim 5 above, and further in view of Moore (US Patent 4,131,405).

a. Regarding claims 8 and 9, Vaughan et al. in view of Stehm disclose the invention as claimed except for each side form designed to impart a pattern or shape onto the surface of the panel. However, is notoriously well known in the art that side forms of formwork or moldings can have a design on them in order to be able to imprint a pattern or shape onto a panel. For example, Moore teaches a formwork or molding (column 1, lines 7-19) wherein the side forms can impart a design, pattern of shape to the panel being formed (column 2, lines 61-66; column 4, lines 8-10). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to modify Vaughan et al. in view of Stehm to use side forms with a design to impart a pattern or shape, such as taught by Moore, in order to create panels that are prefabricated with an architectural finish.

b. Regarding claim 10, Vaughan et al. view discloses the formwork system can be extended using a modular extension mould to prefabricate higher heights of wall panel (column 4, lines 61-62).

6. Claims 13 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughan et al. (US Patent 3,687,412) in view of Moore (US Patent 4,131,405).

a. Regarding claims 13 and 14, Vaughan et al. in view of Stehm disclose the invention as claimed except for each side form designed to impart a pattern or shape onto the surface of the panel. However, is notoriously well known in the art that side forms of formwork or moldings can have a design on them in order to be able to imprint a pattern or shape onto a panel. For example, Moore teaches a formwork or molding (column 1, lines 7-19) wherein the side forms can impart a design, pattern of shape to the panel being formed (column 2, lines 61-66; column 4, lines 8-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vaughan et al. in view of Stehm to use side forms with a design to impart a pattern or shape, such as taught by Moore, in order to create panels that are prefabricated with an architectural finish.

Response to Arguments

7. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH A. PLUMMER whose telephone number is (571)272-2246. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/
Primary Examiner, Art Unit 3633

EAP